



The Institute for Next Generation IT Systems

Presentation to the State Portal Advisory Committee August 26, 2010

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ITng Background

- Aggregation of various institutes, centers, and labs that were IT-focused, including NTI, CACC, COSE, SOSI, CNL, Centaur, ...
- Leverage core strengths of NCSU's CSC and ECE departments:
 - Computer architecture, distributed systems
 - Networking
 - Cloud computing, virtualization
 - Software engineering
 - Visualization, analytics
 - Security
- Formulated in 2008-2009; chartered by the university in 2009
 - Office of the Dean of the College of Engineering
 - Office of the Vice Chancellor for Research
- Launched in April 2010



ITng Goals

- Provide a focal point for IT-related research within NC State University
- Provide a focal point within NC State
 University for IT engagements throughout the state
- Reduce the complexity of NC State's research institutes and centers to the outside world
- Align itself with NC State University's major strategic research initiatives

Economic and Societal Benefit

NCSU Strategic Research Initiatives

Strategic Focus Areas Health & Well-Being

CCMTR
CQSB
BRC
SDPRC
CPBAPG
GHI

CFCE

Energy & Environment

ITRE APWMC
CEREPCIFR CAOE
NCSG ORPF
CIPM CEO
CMAST CTE
CTERE FREEDM

Phytotron NRP

NCSC

WRRI

Educational Innovation

FI CRMSE DGRC BTEC BIT Safety & Security

CRTPC PP
FSCP PSLI
CCTRP SOSI
FSI
SNDA
CDL

Advanced Materials & Manufacturing

NI FMMC CAPPS AIF ECNC NWI MRL IMST CEAR IMSEI CRIM NCRC

Platform Technologies

Advanced Computing & Networking

CESR CSRC CHIPS IAA

ICSE ITng

SOSI DGRC

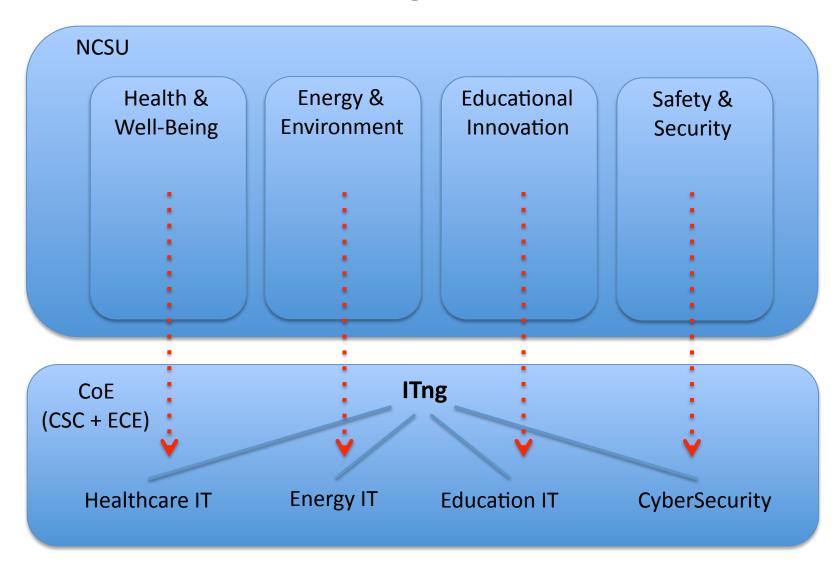
Translation

Policy & Leadership CUACS SPIA CEREP JC IEI SLC INPREE CSLEPS KIETS

Innovation Network El TEC OTT CIMS SBTDC IES

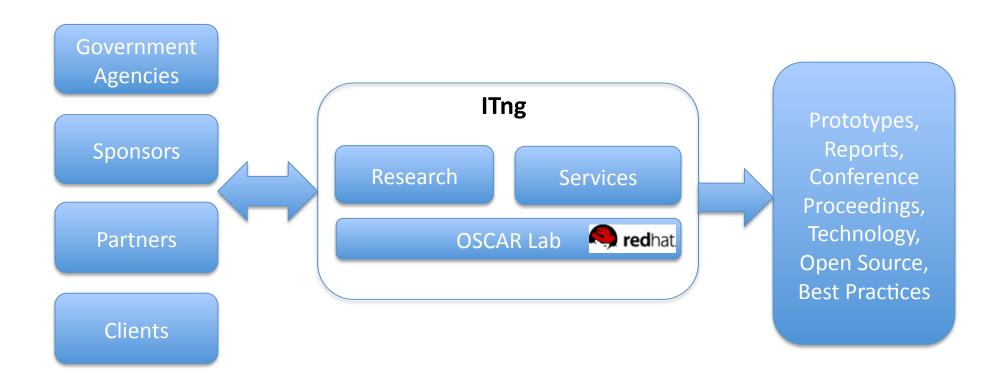


Overall ITng Structure





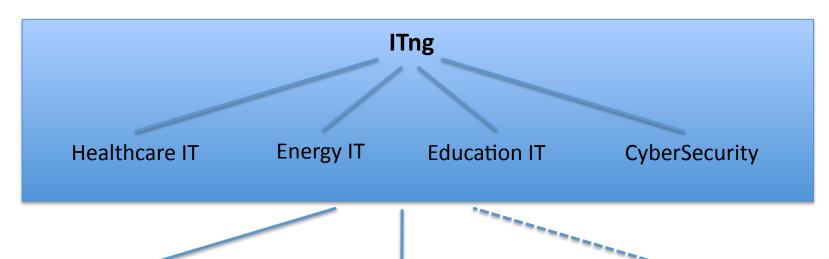
IT Research within NCSU College of Engineering



Collaboration Results



ITng Structure Details



Research Programs, Labs, and Services

SOSI
COSE
(CACC)*
OSCAR Lab
ITng Services

Sponsors

IBM, Cisco, NSA,
Tekelec, Red Hat,
NetApp, MC Dean,
SURFnet, ARO,
Ixia, NCCAR,
others

Partners (current + potential)

FREEDM Center, RENCI
CESR, MCNC,
Friday Institute, IAA,
NC-DPI, NCHICA, UNC-SILS,
UNC-Medical,
others as needed

NC STATEUNIVERSITY

End of Presentation

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